

Tunable Filter Controller Development Kit

Micron Optics' Tunable Filter Controller Development Kit is an electronic piezoelectric actuator driver specially designed for the FFP Tunable Filter (TF or TF2) or Scanning Interferometer. The Development Kit can be used in several modes of operation.

60 V scan range

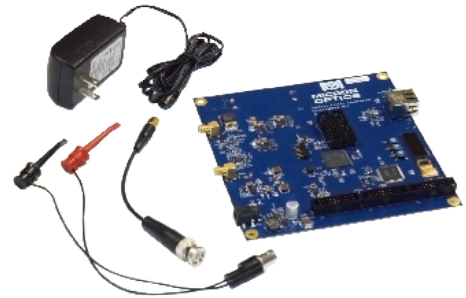
DC + AC Voltage Driver (bias, amplitude and frequency controls)

Capable of being controlled via onboard interface

Labview and Python APIs

Simple UI to control input signal, frequency, and applied voltage

The Tunable Filter Controller Development Kit is an excellent tool for first time users of fiber Fabry-Perot filters to become familiar with filter technology and operations. It also can be used as a lab bench tool in the research of advanced capabilities of tunable filters



Key Features

High Voltage PZT driver

APIs and Windows Application

Onboard controls

Low Noise

High degree of linearity

Small form factor

Fastest way to test FFP Tunable Filters with an easy to use interface.

Properties

Waveform	Symmetric Triangle
Drive Output	~ 0.5 – 57.5 V
DC Offset	~ 0.5 – 30.5 V
AC Amplitude ¹	~ 0 – 57 V
Scan Rate	1, 10, 100, 1000 Hz (selectable)
Drive Noise	< 1 mVrms
Drive Linearity ²	< 1% at scan rates <= 100 Hz, < 5% at 1 kHz
Trigger	3.3 V, 100 Ω load
Trigger Rising Edge	Start of increasing voltage ramp, End of decreasing voltage ramp
Trigger Falling Edge	End of increasing voltage ramp, Start of decreasing voltage ramp
Power Supply	100 - 240 VAC input, 18 VDC output (included)
Drive, Sync/Trigger Connector Type	SMA
Communication	Ethernet

Notes

1 Amplitude range is reduced to ~38 V at 1 kHz scan rate

2 Over 90% of scan range